

Amendments to the Drawings:

The attached sheet of drawings includes changes to figures 1A-1D. This sheet replaces the original sheet of figures 1A-1D. In all four figures 1A-1D previously omitted notation PRIOR ART has been added.

Attachment: Replacement Sheet, Annotated Sheet Showing Changes

REMARKS / ARGUMENTS

Specification

In the specification, the first full paragraph beginning on page 5 has been amended to correct a typographical error, a double comma. No new matter is added and this change is fully supported in the specification and drawings.

Drawings

The Examiner objected to figures 1A-1C as lacking a notation of PRIOR ART. Figures 1A-1D, all on the same sheet, have been amended include a notation of PRIOR ART, a replacement sheet is included herein. No new matter is added. The applicant respectfully requests that Examiner to withdraw this objection.

Claims 1-20 are pending in the application, 1-12 stand rejected and 13-20 were allowed.

Claim Rejections - 35 USC §102(e)

Claims 1-12 stand rejected under 35 USC § 102(e) as being anticipated by Ratnik, U.S. Patent 6,793,148.

Applicant herewith submits a petition under 37 CFR 1.131 swearing behind the Ratnik reference. The declaration and exhibits cited show that any anticipating disclosure in Ratnik was reduced to practice prior to the filing date of Ratnik and therefore show prior invention. The Ratnik reference has a filing date of August 10, 2002. Applicant submits a brochure made in preparation of future sales dated February 4, 2002. Applicant also submits invoices for prototyping the invention by a machine shop from July and August 2001, the declaration also referencing conceptual technical drawings of the invention circa April 2001 used in connection with these invoices. The Examiner is requested to remove Ratnik as a prior art reference.

Nevertheless, the claims have been amended to include the element of a flattened face area and one or more shoulders for an intermediate member. Flattened face areas used in the present configuration are not found in Ratnik figure 8 nor are known by applicant to be in the prior art. Ratnik appears to simply insert a snow emitter in an arcuate surface (figure 1@ 14, 12; figures 6 and 8 @22, 23). Having a flattened face element is patentably distinct both because it affords an easier alignment procedure for

jigging a plurality of intermediate members during welding (see reference e.g the first full paragraph beginning on page 5). In fact, in the case of an intermediate member having multiple equidistant flattened faces, such as the hex intermediate member, it is possible to align neighboring adjoining intermediate members with accuracy by placing them on a common flat surface. The flattened areas also afford a larger area for inserting a gasket seal between the emitter and the face.

The limitation of an intermediate member being formed from a single billet has been removed from Independent claims 1 and 5 to obviate the Examiner's product by process objection.

The suitability of shoulders for being orbitally welded of claim 3 is patentably distinct. Orbital welding allows for greater quality and mass production of misting systems and therefore more utility of the present invention over the prior art.

Independent claim 5 has likewise been amended to include the element of a flattened face, and for the same reasons. Claims 9 and 17 have been amended to substitute "mass" with "heat capacity" because "mass" is an unnecessary limitation. The heat capacities of two materials are determined by both their mass and the inherent heat capacity of each. For two like materials to have matched heat capacities their masses would need to be the same. However, for two different materials to have matched heat capacities their masses may differ. This is patentably distinct because the finished manifold will have a far better weld between intermediate members and tubing if their heat capacities are matched prior to welding, needed to meet industry welding quality standards such as the ASME (American Society of Mechanical Engineers) standards. Otherwise the heat sufficient to weld a first material may damage the second material being welded to it, resulting in a defective and sub-standard weld.

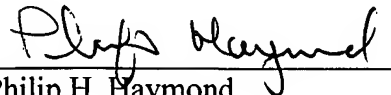
For the reasons above, Applicant therefore respectfully requests that the Examiner withdraw these rejections under §102(e).

Applicant gratefully acknowledges the allowance of claims 13-20. Some of these claims were amended to insert and "a" for purely typographical reasons, without narrowing or enlarging these claims in any way. Claim 17 was amended to substitute "heat capacity" for "mass" as noted above.

Conclusion

In light of the foregoing, applicant suggests that claims 1-20 are now in condition for allowance and respectfully requests a timely Notice of Allowance be issued in this case.

Respectfully submitted,



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Replacement Sheet

Amended

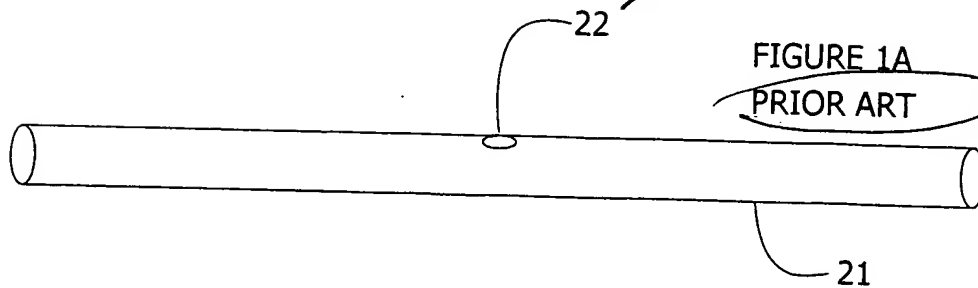


FIGURE 1A
PRIOR ART

added

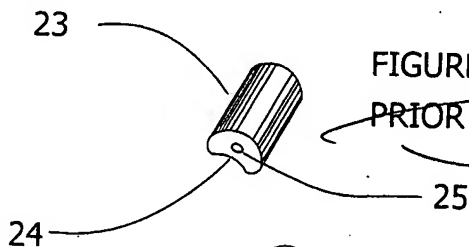


FIGURE 1B
PRIOR ART

added

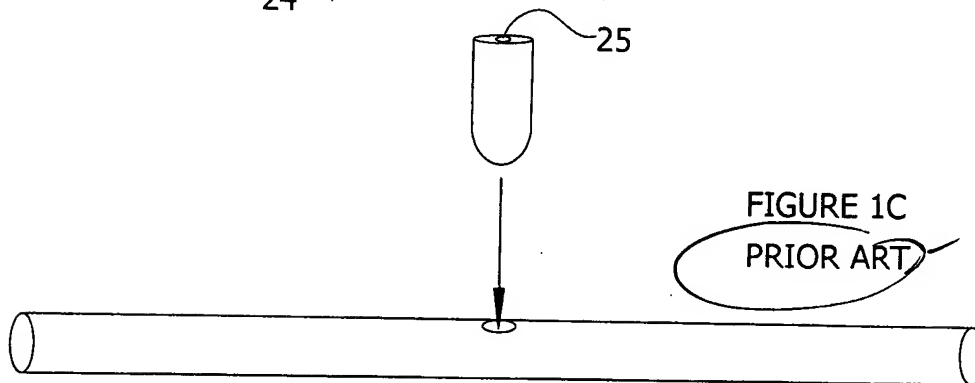


FIGURE 1C
PRIOR ART

added

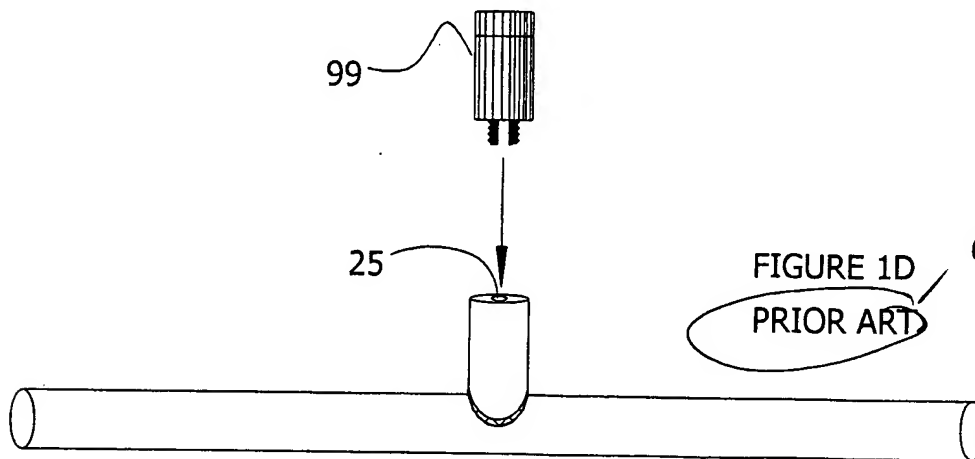


FIGURE 1D
PRIOR ART

added